



Hydro Engineering Centre

Building the future of hydropower

in France and worldwide

Our priorities

- hydraulic safety
- public safety
- occupational health for employees and service providers
- industrial performance
- environment-friendly hydropower



INTEGRATED ENGINEERING SERVICES

7 sites

in France in close proximity to hydropower installations

Brive, Grenoble, Le Bourget-du-Lac (headquarter), Lyon, Marseille, Mulhouse and Toulouse

959

employees at the end of 2014

engineers, technicians and project managers

448 M€

of investment expenditures in 2014



Designing, building, renovating, innovating, developing...

- Designing and building hydropower schemes over 65 years of experience and expertise in France and worldwide
- Renovating and modernising to improve safety, performance and environmental integration
- Continually innovating
- Developing sustainable hydropower in France and abroad

ISO 9001, 14001 & MASE* approved

EDF's Hydro Engineering Centre works with partners from France and abroad. Independent of the equipment manufacturers and entrepreneurs, it guarantees an objective research of technical solutions for the owners and operators.

*MASE Business Security Improvement Manual

A WIDE RANGE OF SERVICES

Expertise to enhance facility assets and improve its performance in terms of finance, safety, environmental impacts and availability.

Engineering services from the design stage to the commissioning.

EDF's Hydro Engineering Centre proposes **integrated services** covering :

- the design, study and construction of new structures ;
- the renovation, reconstruction and modernisation of existing installations.



Our clients

EDF's generation facilities : 90% of the Hydro Engineering Centre's activity concerns EDF's generation facilities (hydraulic, thermal & nuclear), the Island Electric Systems (Corsica, Guyana, Reunion Island) and EDF's subsidiaries (Shema, FHYM, FHYT, EDF EN, EDF Energy, NTPC).

External clients : EDF also provides its expertise and services to external customers in France and abroad (Africa, Middle-East, Eastern Europe, Asia-Pacific, North-Central and South America), assisting owners, operators, businesses, development banks or private investors.



5 MAIN AREAS OF ACTIVITY

- Mechanical and Electrical engineering
- Automation and SCADA
- Civil engineering
- Project management
- Sustainable development.

Working for different types of developments

- Hydropower schemes (dams, power stations, galleries, penstocks, canals)
- Pumped storage power stations
- Tidal power plants
- Marine turbines



RECOGNIZED EXPERTISE in a number of key professional organizations

EDF's Hydro Engineering Centre serves on a number of French and international committees, such as the French Dams and Reservoirs Committee, the World Water Forum, ICOLD (International Commission on Large Dams) or IHA (International Hydropower Association).

Every year, about a hundred engineers and experts from EDF's Hydro Engineering Centre are involved in main worldwide conferences for hydropower : the Conference on Hydropower & Dams (Europe, Asia, Africa), the Hydrovision Conference (USA, Brazil, Russia), the IHA conference, the Journées SHF (French Hydraulic Society), the Congrès de l'AFTES (French Association for Tunnels and Underground Works), etc.

EDF's Hydro Engineering Centre also counts other international operators amongst its partners, such as Hydro-Quebec in Canada, IWHR in China and Alpiq in Switzerland.

AN **international** PRESENCE

EDF's Hydro Engineering Centre participates in the construction of new hydropower structures worldwide in two different ways :

- as a **consultant** (for technical studies) or dam owner engineer assignments in **India** (Koldam and Tehri), **Israël** (Gilboa), and **Africa** (Inga3 and grand Inga projects in RDC),
- Supervising construction works in **Laos** (Nam Theun 2).

EDF's Hydro Engineering Centre is also taking part in potential projects and investments currently under study in Brazil, Mozambique and Nepal, in support of EDF's international development policy.

EXPERTISE

RECOGNIZED

WORLDWIDE



Present
in over
30 countries

